

**From:** [Granger, Michelle](#)  
**To:** [Hauber, Erin M CIV USARMY CENWK \(USA\)](#)  
**Subject:** RE: Pohatcong OU3 - 30% Remedial Design USACE comments  
**Date:** Tuesday, November 13, 2018 11:45:00 AM  
**Attachments:** [image001.png](#)

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Hi, Erin-

Hope all is well!

I was out most of Thursday and all of Friday. How does tomorrow look for you? I'm open all morning.

Best,

Michelle-

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**From:** Hauber, Erin M CIV USARMY CENWK (USA) <Erin.M.Hauber@usace.army.mil>

**Sent:** Wednesday, November 07, 2018 4:02 PM

**To:** Granger, Michelle <Granger.Michelle@epa.gov>

**Subject:** RE: Pohatcong OU3 - 30% Remedial Design USACE comments

Michelle,

The day escaped me; however, I did gather some answers about hot soil sampling. Are you available to discuss tomorrow or Friday?

Tomorrow, I have the following times open:

- 8-9:30 CT
- 10:30-11:30 CT
- 12:30-3:30 CT

Friday: pretty open

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**From:** Hauber, Erin M CIV USARMY CENWK (US)

**Sent:** Tuesday, November 6, 2018 3:39 PM

**To:** 'Granger, Michelle' <[Granger.Michelle@epa.gov](mailto:Granger.Michelle@epa.gov)>

**Subject:** RE: Pohatcong OU3 - 30% Remedial Design USACE comments

Michelle – I'll touch base with you tomorrow after I chase down a few hot soil sampling questions. We recently conducted hot soil sampling at Diaz (NY R2) via sonic drilling (to 30-ft bgs). I do think there are some risks worth discussing given our depths and that our point of entry is within the building. A standard sampling density is 1 boring every 1,000 sq ft. That would mean upwards of 20 locations which would require about ~2 months of sampling time under normal temperatures.

Attached a couple Diaz pictures and hot soil sampling SOP for reference.

I'm around tomorrow from 8:30-9AM, and 10-12pm CST.

Erin

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**From:** Granger, Michelle [<mailto:Granger.Michelle@epa.gov>]

**Sent:** Tuesday, November 6, 2018 2:57 PM

**To:** Hauber, Erin M CIV USARMY CENWK (US) <[Erin.M.Hauber@usace.army.mil](mailto:Erin.M.Hauber@usace.army.mil)>

**Subject:** [Non-DoD Source] RE: Pohatcong OU3 - 30% Remedial Design USACE comments

Hi, Erin-

Wow, you have great timing! I just briefly discussed the 30% RD comments with Kim.

So regarding soil confirmation sampling...we want them to do it. We are thinking we'll have them submit a tech memo prior to the 90% RD Report providing a sampling plan with details like depth of samples, analytes to be sampled, etc. Would you be able to draft some general language regarding what we want to see in the sampling plan? **Yes, but I need to chase down a few logistical questions. Hot soil sampling with a roto sonic rig to these depths and in some cases, angled, will certainly be tricky and expensive, but not impossible.** And...How would this effect item #6 of your comments for Section 7.2.2 ? Would you still make the same recommendation in item #6? **If we go the soil sampling route, we could relax these requirements; however, daily PID readings and biweekly vapor readings are fairly common practice even with soil samples.**

Also, for the Section 7.4 comment – Do you recommend that we see real-time air monitoring data? If so, why? **Yes. You could go two routes: 1) you only want to receive data if there's an exceedance of an indoor air threshold (within a specified timeframe) or 2) you want access to the data / regular reports as well to verify there are no**

issues. EPA has requested access to Groundswell's real-time air monitoring website on other ISTR projects, so either #1 or #2 are normal requests.

For Dec. sampling –yes, 100% OS please. I will get back to you on split sampling tomorrow. **Got it!**

I'll be around tomorrow if you want to discuss anything further. I'm also here now til 4:30pm.

Thank you!

Michelle-

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**From:** Hauber, Erin M CIV USARMY CENWK (US) <[Erin.M.Hauber@usace.army.mil](mailto:Erin.M.Hauber@usace.army.mil)>

**Sent:** Tuesday, November 06, 2018 3:30 PM

**To:** Granger, Michelle <[Granger.Michelle@epa.gov](mailto:Granger.Michelle@epa.gov)>

**Cc:** Nanci Higginbotham <[Nanci.E.Higginbotham@usace.army.mil](mailto:Nanci.E.Higginbotham@usace.army.mil)>

**Subject:** RE: Pohatcong OU3 - 30% Remedial Design USACE comments

Michelle,

I wanted to check in to see if you'd like to discuss any of our 30% RD comments.

For the purposes of staffing we also wanted to confirm that EPA would like full time oversight when the additional soil borings are installed (12/24-12/29) during the plant shutdown. We've relayed to our construction folks that 100% oversight is likely needed.

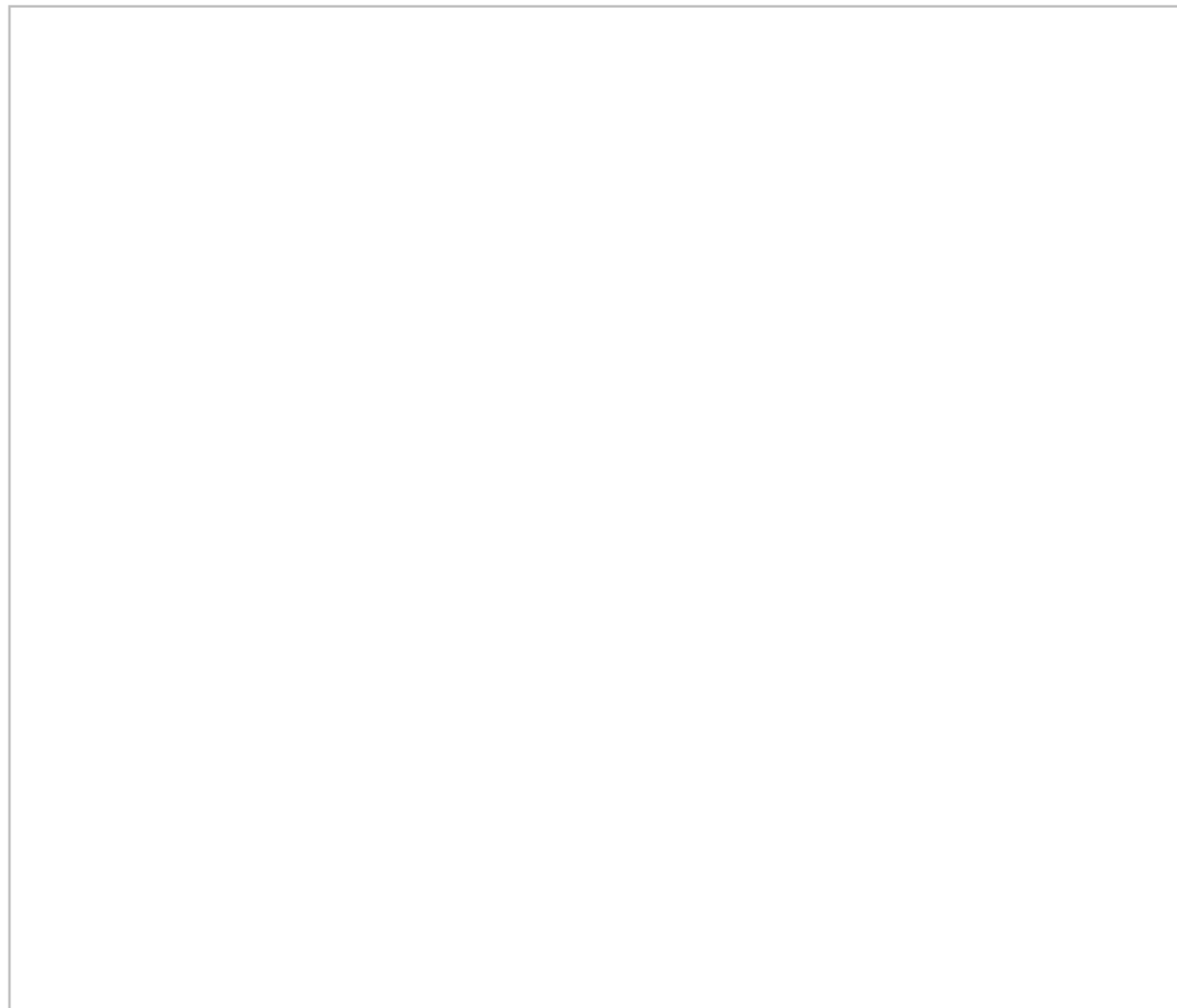
For reference, attached is the comparison of split sampling results associated with PDI soil borings that our chemist, Wendy Stonestreet, assembled. The comparison did not identify significant analytical discrepancies between the PRP's mobile lab and EPA's CLP lab. We collected a total of 59 split soil samples, which met the objective of 5-10% of primary samples.

Given the positive comparability of split sampling results from this past spring and the likelihood of laboratory shipping headaches near the peak of the holidays, our preference is to forgo split sampling during this short event; however, if EPA would like to pursue collection of split samples during this 6 day event, we can start making preparations.

Thanks,

Erin

View in HTML:



-----Original Message-----

From: Hauber, Erin M CIV USARMY CENWK (US)

Sent: Friday, October 26, 2018 2:14 PM

To: Granger, Michelle <[Granger.Michelle@epa.gov](mailto:Granger.Michelle@epa.gov)>

Cc: L'Ecuier, Jason R CIV USARMY CENWK (US) <[Jason.R.LEcuier@usace.army.mil](mailto:Jason.R.LEcuier@usace.army.mil)>; Higginbotham, Nanci E CIV USARMY CENWK (US) <[Nanci.E.Higginbotham@usace.army.mil](mailto:Nanci.E.Higginbotham@usace.army.mil)>; Brink, Bradley J CIV USARMY CENWK (US)

<[Bradley.J.Brink@usace.army.mil](mailto:Bradley.J.Brink@usace.army.mil)>; Stonestreet, Wendy E CIV USARMY CENWK (US)

<[Wendy.E.Stonestreet@usace.army.mil](mailto:Wendy.E.Stonestreet@usace.army.mil)>

Subject: RE: Pohatcong OU3 - 30% Remedial Design USACE comments

Michelle,

Please reference updated comment matrix. Brad pointed out that for our additional characterization borings, we'll want to ensure Ramboll/Environ collects samples until they reach top of competent bedrock, regardless of whether that occurs below 122 ft bgs (30% Report states, whichever is shallowest). Contamination extends deeper towards the east, and we'd expect TCE to be present at similar depths as SB25 & 26, assuming it extends to the proposed borings/ovals.

We did not have any comments over the Pilot Study Treatability Evaluation Report and agreed with their conclusions.

Let us know if you have questions.

Erin

-----Original Message-----

From: Hauber, Erin M CIV USARMY CENWK (US)

Sent: Thursday, October 25, 2018 8:55 AM

To: Granger, Michelle <[Granger.Michelle@epa.gov](mailto:Granger.Michelle@epa.gov)>

Cc: L'Ecuyer, Jason R CIV USARMY CENWK (US) <[Jason.R.LEcuyer@usace.army.mil](mailto:Jason.R.LEcuyer@usace.army.mil)>; Higginbotham, Nanci E CIV USARMY CENWK (US) <[Nanci.E.Higginbotham@usace.army.mil](mailto:Nanci.E.Higginbotham@usace.army.mil)>; Brink, Bradley J CIV USARMY CENWK (US) <[Bradley.J.Brink@usace.army.mil](mailto:Bradley.J.Brink@usace.army.mil)>; Stonestreet, Wendy E CIV USARMY CENWK (US) <[Wendy.E.Stonestreet@usace.army.mil](mailto:Wendy.E.Stonestreet@usace.army.mil)>

Subject: Pohatcong OU3 - 30% Remedial Design USACE comments

Michelle,

Attached are our comments to the Draft 30% Remedial Design.

Overall I thought it was a very thorough document with plenty of detail for a 30%. The key element we should discuss are the performance criteria that qualify that site for shutdown. Most of my comments center around shutdown metrics and refining performance monitoring.

Also, we are targeting sending you comments on the PDI report by end of this week, although at this point we may not have any significant comments. Most all of the PDI data have been communicated previously through weekly reports and powerpoint presentations, and we agree with the PDI/Pilot Study conclusions that SVE alone won't work and data gaps exist to the east of Molding Room.

We can organize a call to talk through once you've reviewed.

Thanks,

Erin

Erin Hauber, P.E.

Civil Engineer

Kansas City District

US Army Corps of Engineers

816.389.2280